

State of New Mexico ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Telephone (505) 428-2500
Fax (505) 428-2567

www.nmenv.state.nm.us



RON CURRY SECRETARY

DERRITH WATCHMAN-MOORE
DEPUTY SECRETARY

PUBLIC NOTICE NUMBER 04-05

NEW MEXICO ENVIRONMENT DEPARTMENT HAZARDOUS WASTE BUREAU Santa Fe, New Mexico 87505

April 16, 2004

PETITION FOR SITE-SPECIFIC VARIANCE FROM TREATMENT STANDARDS FOR CERTAIN MIXED WASTES GENERATED AT SANDIA NATIONAL LABORATORIES

The federal Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6901 to 6992(k), provides for the regulation of hazardous waste. Congress waived the immunity of the United States for actions brought under state hazardous and solid waste laws as well as under RCRA. Pursuant to Section 3006 of RCRA, 42 U.S.C § 6926, the U.S. Environmental Protection Agency (EPA) delegated to NMED, on April 16, 1985, by delegation numbers 8-31 and 8-32, the authority to enforce the Hazardous Waste Act (HWA) and its implementing regulations, the New Mexico Hazardous Waste Management Regulations (HWMR), 20.4.1 NMAC, in lieu of EPA enforcement through RCRA. NMED has maintained its delegation from EPA over hazardous waste management in New Mexico and from time to time has amended its state program to conform to statutory or regulatory changes in RCRA.

Treatment standards for hazardous wastes are found at 20.4.1.800 NMAC, incorporating 40 CFR 268, must be met prior to land disposal. The U. S. Department of Energy (DOE) and Sandia Corporation have petitioned the NMED for a site-specific variance from treatment standards that would apply to certain mixed wastes generated at Sandia National Laboratories (SNL). Mixed wastes are those wastes that contain both hazardous and radioactive components. The DOE and Sandia Corporation are co-operators of SNL. More specifically, the site-specific variance request would apply only to manufactured items that are less than debris-sized, exhibit the toxicity characteristic for metal(s), contain radioactive material, and may be contaminated externally by radioactive materials. Hazardous metals that may be in the wastes vary and may include cadmium, chromium, lead, and silver. Radioactive components also vary and may include cesium-137, radium-226, strontium-90, nickel-63, or uranium isotopes. The manufactured items include manufactured radioactive sources, and spark gap, Kryton, switch,

electron, and over-voltage gap tubes. SNL personnel estimate that 0.42 cubic meters of such wastes are currently in inventory. They further estimate that future generation of these waste types will not exceed a total of 2 cubic meters per year.

The regulations providing for site-specific variances from treatment standards are found at 20.4.1.800 NMAC incorporating 40 CFR 268.44(h-m). Pursuant to the regulations, the NMED may approve the petition provided that it is not physically possible to treat the waste to the level specified in the treatment standard, or by the method specified as the treatment standard. The petitioner must demonstrate that because the physical or chemical properties of the waste differ significantly from the waste analyzed in developing the treatment standard, the waste cannot be treated to the specified level or by the specified method. In this case, because such wastes contain radioactive materials, the NMED believes the physical properties of the subject wastes are different than those that were analyzed to develop the treatment standard. NMED further believes in this case that treatment and verification of treatment by the usual methods would not be protective of workers.

SNL has petitioned to alternatively treat the subject mixed wastes by the method of macroencapsulation, a process whereby the hazardous metals (and radionuclides) would be immobilized by application of surface coating materials or use of a jacket of inert inorganic materials. Additionally, SNL asserts that macroencapsulation would reduce radiation exposure to workers and would provide a safer transportation form for final land disposal of these wastes. The NMED agrees with these assertions and believes that macroencapsulation of such wastes would be protective of human health and the environment.

NMED intends to approve the petition, pending public comment. The administrative record for this action includes the petition and related public notice documents, and the compliance history of SNL. The complete administrative record may be viewed at NMED, Hazardous Waste Bureau, at 2905 Rodeo Park Drive East, Building 1, Santa Fe, New Mexico, 87505-6303, between the hours of 8:00 a.m. and 5:00 p.m. The petition may also be viewed at the Zimmerman Library at the University of New Mexico between the hours of 10:00 a.m. and 7:00 p.m., Monday through Saturday. To obtain a copy of the administrative record or any part thereof (at 25 cents per page), please contact Mr. William P. Moats by calling (505) 284-5086.

Any person that wishes to comment on the petition should submit written comments along with their name and address, to Mr. Moats at the address given above. Only comments received by 5:00 p.m., May 16, 2004 will be considered in arriving at a final decision.